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A PLUMOSE VARIETY OF THE EBONY SPLEENWORT.

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(Plate 22.)

ASPLENIUM EBENEUM, Aiton, var. Hortonae, n. var. — Habit and rootstock as in the specific form. Fronds in two series as in normal forms; lower series smallest, rosette-like in arrangement, reclining in position, normally sterile, with closely set, more or less imbricated, alternate pinnae; larger series taller, erect, abnormally sterile, with more distinct, alternate, sessile, sub-sessile or short-stalked, obliquely incised or deeply pinnatifid obtuse pinnae, the oblique lobes cuneate and coarsely serrated, the basal lobes often distinct, the upper one the largest and somewhat auriculate; laminae 3 to 2 inches broad, pinnate nearly to the pinnatifid acute apex, lower portion abruptly diminished, the reduced pinnae lobed, or divided, and wholly different from the reduced simpler lobes of the normal forms. Stipe short, and, as well as the rhachis, vivid chestnut, or reddish brown, glossy, terete, or obscurely furrowed along the face in the living plant, shrivelling in drying and then appearing as if striated; clothed at the base with a few delicate linear-acuminate, ciliated, transparent scales with a central framework of brown, and containing two small vascular bundles that shortly coalesce into one; veins flabellately forked in the basal lobes, the whole system forming what Luerssen terms "Nervatio Sphenopteridis" in which some of the pinnae resemble sections of Asplenium Adiantum-nigrum.

This remarkable and most beautiful variety of the Ebony Spleenwort was found growing on limestone cliffs in company with typical Asplenium ebeneum and A. Trichomanes by Mrs. Frances B. Horton, at Brattleboro, Vermont, in September, 1900. It presents an appearance so striking that at first I was inclined to regard it as a new species.

Its lines of variation are, it is true, in the direction of a natural disposition on the part of even typical forms to become more or less serrated, but in the present instance this has been carried so far in the oblique incisions and lobings, and overlapping of the segments, that the normal form is completely lost sight of and in those fronds with closely imbricated pinnae the whole lamina has a beautifully frilled appearance that suggests some forms of Asplenium lunulatum, Swartz.

Coarsely serrated fronds of A. ebeneum are not infrequently found, especially in some of the highly developed southern forms with the pinnae conspicuously lobed, and a very remarkable form was collected in Maine several years ago by Miss Kate Furbish, but nothing like the present form, in which the change is so great as to render the plant almost unrecognizable, has ever been recorded.

Mrs. Horton is to be congratulated on so interesting a discovery, and it is to be hoped that she may be rewarded still further another season by finding fertile fronds. To judge from the plants already received this form must have been in existence several years, as the annual growth and decay are easily traced on the rootstock. I owe to the courtesy of Dr. Robinson the privilege of publishing this account as he placed in my hands the original specimen, received from Mrs. Horton, to whom I am also under obligations for an additional supply of necessary material. I am likewise indebted—and the readers of Rhodora no less so—to Miss Margaret Slosson for her kindness in preparing the plate which illustrates this account.<sup>1</sup>

EXPLANATION OF PLATE 22.— Asplenium ebeneum, var. Hortonae; fig. 1, habital sketch; fig. 2, scale from base of stipe (magnified); fig. 3, lower pinna; fig. 4, one of the principal pinnae. Var. serratum, Gray in litt. and in herb. Davenport (Mass. Hort. Soc. 1872); fig. 5, a pinna from the original specimen collected by myself in 1872. Asplenium ebeneum (typical); fig. 6, a normal pinna.

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<sup>&</sup>lt;sup>1</sup>The name Asplenium ebeneum was first published by William Aiton in Hortus Kewensis, Vol. III. p. 462, London, 1789, with the following description "fronde pinnata: pinnis lanceolatis subpaleatis serratis basi auriculatis, stipite laevissimo simplici." The date usually assigned for this publication is 1793, but the imprint on the title page of the copy in the Massachusetts Horticultural Society's Library is 1789.